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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/524,366	02/11/2005	Jurgen Meyer	032301.411	9856	
25461 759	90 07/10/2006		EXAMINER		
•	BRELL & RUSSELL	HAILEY, PATRICIA L			
1850 M STREE SUITE 800	T, N.W.,	ART UNIT	PAPER NUMBER		
WASHINGTON, DC 20036			1755		
			DATE MAIL ED: 07/10/200	4	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary		Ap	olication No.	cation No. Applicant(s)				
		10	/524,366	MEYER ET AL.				
		Ex	aminer	Art Unit				
			ricia L. Hailey	1755				
Period fo	The MAILING DATE of this commun or Reply	ication appears	on the cover sheet with the	ne correspondence ad	ddress -			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD F CHEVER IS LONGER, FROM THE M nsions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this comn o period for reply is specified above, the maximum st re to reply within the set or extended period for reply reply received by the Office later than three months a ed patent term adjustment. See 37 CFR 1.704(b).	IAILING DATE of 37 CFR 1.136(a). nunication. atutory period will app will, by statute, cause	OF THIS COMMUNICAT In no event, however, may a reply b ly and will expire SIX (6) MONTHS to the application to become ABANDO	ION.  e timely filed  from the mailing date of this of DNED (35 U.S.C. § 133).				
Status								
1) 又	Responsive to communication(s) file	ed on <i>04 Augus</i>	t 2005					
2a)□	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.							
3)□	, <del></del>							
٥,۵	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
	ologod in doodrading with the practi	oo anaci Ex pa	ne quayie, 1000 O.D. 11	, 400 0.0. 210.				
Dispositi	on of Claims							
4)⊠	☑ Claim(s) <u>1-20</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)	S) Claim(s) is/are allowed.							
6)⊠	⊠ Claim(s) <u>1-20</u> is/are rejected.							
7)	☐ Claim(s) is/are objected to.							
8)[	Claim(s) are subject to restrict	tion and/or ele	ction requirement.					
Applicati	on Papers							
9)	The specification is objected to by the	e Examiner						
	10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
		, by the Exami			10-102.			
Priority ι	ınder 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:								
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
	application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.								
Attachmen	t(s)							
_	e of References Cited (PTO-892)		4) Interview Summ	ary (PTO-413)				
2) 🔲 Notic	e of Draftsperson's Patent Drawing Review (P		Paper No(s)/Ma	il Date				
B) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date <u>02/11/05, 08/04/05</u> .  5) Notice of Informal Patent Application (PTO-152)  6) Other:								
- apol (10(3)) Mail Date <u>02 (1)(00, 00/04/00</u> .								

**Art Unit: 1755** 

Applicants' Preliminary Amendment, filed on February 11, 2005, has been made of record and entered. No claims have been canceled; new claims 8-20 have been added.

Claims 1-20 are now pending in this application.

### Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Applicants' Priority Document was filed on February 11, 2005.

## Claim Rejections - 35 USC § 101/35 U.S.C.§ 112

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 6 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 6 recites the phrase "Use of the silanised,..." which renders the claim drawn to non-statutory subject matter.

Application/Control Number: 10/524,366 Page 3

Art Unit: 1755

5. Claim 6 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example Ex parte Dunki, 153 USPQ 678 (Bd.App. 1967) and Clinical Products, Ltd. v. Brenner, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

This claim has not been further treated on the merits.

In the event that claim 6 is re-written to overcome this rejection, this claim (and any claims depending therefrom) will be subject to an election by original presentation, as Applicants' have already had an action on the merits on the claims directed to the silanised, structurally modified, pyrogenically produced silicas.

6. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 provides for the use of silanised, structurally modified, pyrogenically produced silicas, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

**Art Unit: 1755** 

### **Double Patenting**

Page 4

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1, 7, and 8 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 4-9 of copending Application No. 10/532,202.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in the instant application are directed to silanised, structurally modified, pyrogenically produced silicas, whereas the claims in the copending application are directed to pulverulent materials and mixtures thereof, in that they contain one or more surface-modified and structure-modified pyrogenically

Art Unit: 1755

prepared metalloid or metallic oxides, later defined as a "silanized structure-modified silica having alkylsilyl groups attached to said silica" (claim 5 in the copending application).

Page 5

Both sets of claims also recite the same physical chemical properties. See instant claim 8 and claim 9 of the copending application.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

#### Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 10. Claims 1-4 and 7-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Deller et al. (U. S. Patent No. 5,776,240, Applicants' submitted art).

Deller et al. disclose granules based on silicon dioxide having properties comparable to that recited in Applicants' claim 8. The particles may be prepared by dispersing pyrogenically prepared silicon dioxide in water, spray drying it and silianizing the granules obtained with agents such as halosilanes, alkoxysilanes, silazanes, and/or siloxanes. See col. 1, line 48 to col. 2, line 5 of Deller et al.

**Art Unit: 1755** 

Exemplary agents include organosilanes of the type  $(RO)_3Si(C_nH_{2n+1})$ , where R is alkyl and n = 1 to 20. Prefereably, the silanizing agent is tritmethoxyoctylsilane. See col. 3, lines 20-21 and col. 5, lines 32-33 of Deller et al.

The silanization may be carried out by spraying the granular material with the silanizing agent, and subsequently heat-treating (under a protective inert gas, such as nitrogen) the mixture at a temperature of from 105°C to 400°C over a period of 1 to 6 hours.

The silanization can be carried out with heatable mixers equipped with spraying facilities; examples include phoughshare mixers, disk dryers, or fluidized bed dryers.

See col. 6, lines 6-11 of Deller et al.

In view of these teachings, Deller et al. anticipate claims 1-4 and 7-16.

11. Claims 1-4 and 7-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Ettlinger et al. (U. S. Patent No. 5,665,156).

Ettlinger et al. teach silanized, pyrogenically prepared silicic acids that are prepared by treating said silicic acids with an organosilane selected from the group (RO)<sub>3</sub>SiC<sub>n</sub>H<sub>2n+1</sub>, in which n is from 10 to 18 and R is alkyl. See col. 1, lines 22-27 of Ettlinger et al.

Examples of the organosilane include hexadecyltrimethoxysilane and octadecyltrimethoxysilane. See col. 2, lines 14 and 15 of Ettlinger et al.

Page 7

**Art Unit: 1755** 

Patentees' silicic acids are prepared in that the pyrogenically prepared silicic acids are placed in a mixer, and while being mixed the silicic acids are sprayed, optionally first with water and then with the organosilane compound; mixing is continued for from 15 to 30 minutes, and then temperature stabilization is done at a temperature ranging from 100°C to 160°C over a period of time from 1 to 3 hours. See col. 2, lines 8-24 of Ettlinger et al.

The silanized silicic acids of Ettlinger et al. have properties comparable to those recited in claim 8, except for the DBP value; however, given that the reference teaches the remaining claimed properties, one skilled in the art would anticipate the silanized silicic acids of Ettlinger et al. to exhibit a comparable DBP value. See Table 2 of Ettlinger et al.

The silanized silicic acids disclosed in Ettlinger et al. are employable as thickening agents in liquids, such as water-dilutable paints, resins, rubber, cosmetic articles, toner powders, as agents for improving pourability, and as reinforcing fillers. See col. 3, lines 13-20 of Ettlinger et al.

In view of these teachings, Ettlinger et al. anticipate claims 1-4 and 7-11.

12. Claims 1, 3, 7, and 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Bock et al. (U. S. Patent No. 6,020,419).

Bock et al. disclose transparent coating compositions used as starting materials such as clear lacquer applications (col. 2, lines 18-27), comprising a material consisting

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**Art Unit: 1755** 

of nanoscale primary particles incorporated as solids. See col. 2, lines 28-31 of Bock et al.

Examples of these materials include pyrogenic silicas; surface-modified ones are preferred, said modification is conventionally achieved with compounds such as octyltrimethoxysilane. See col. 3, lines 57-67 of Bock et al.

The Example of Bock et al. depicts application of a lacquer to an aluminum sheet. In view of these teachings, Bock et al. anticipate claims 1, 3, 7, and 17-20.

#### Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Hailey whose telephone number is (571) 272-1369. The examiner can normally be reached on Mondays-Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 1700 Receptionist, whose telephone number is (571) 272-1700.

Page 9

LIZABETH WOOD ZIMARY EXAMINER

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Patricia L. Hailey/plh

Examiner, Art Unit 1755

June 26, 2006